

Lawrence Livermore National Laboratory

Ergonomics Standard

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Preface

The Ergonomics Standard is one of several local Lawrence Livermore National Laboratory (LLNL) environmental, safety, and health standards that were initially prepared during the Work Smart Standards Closure Process to address and supplement areas not adequately covered by Department of Energy orders or national consensus standards. The original LLNL Ergonomics Program Work Smart Standard was approved on March 16, 1999. Questions or comments about this standard should be addressed to the Safety Programs Division or Ergonomics Subject Matter Expert in the Hazards Control Department.

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Ergonomics Standard

1.0 Purpose

This standard has been developed by LLNL to reduce the risk of injuries or illnesses from work that typically involves ergonomics risk factors. This standard applies to work tasks such as office, laboratory, design, material handling, repair and maintenance. LLNL works to be proactive in recognizing and preventing ergonomic-related injuries/illnesses.

2.0 Scope and Application

This standard applies to all LLNL workplaces and jobs where an employee may be exposed to ergonomics risk factors. This standard will be applied proactively to Laboratory operations.

3.0 Applicable References

National Institute for Occupational Safety and Health, Department of Health and Human Services, "Elements of Ergonomics Programs, A Primer Based on Workplace Evaluations of Musculoskeletal Disorders," NIOSH Publication No. 97-117 (March 1997)

LLNL Facilities Standards PEL-E-16510 Interior Lighting January 15, 1998

US Department of Labor Occupational Safety and Health Administration "Ergonomics program management guidelines for meat packing plants" OSHA 3123 1993

BSR/HFES 100 Draft Standard for Trial use "Human factors engineering of computer workstations" March 31, 2002

ANSI/BIFMA X5.1-2002 American National Standard of Office Furniture General Purpose Office Chairs- Tests

BIFMA G1-2002 Ergonomics Guideline for VDT (Video Display Terminal) Furniture Used in Office Work Spaces

UCRL-AR-129189 LLNL Occupational Medicine Standard Medical Evaluator of Employees

4.0 Required Standards

Public Law 91-596, OSHA Act of 1970 (5) (a) (1) OSHA Act of 1970

DOE Order 440.1A "Worker protection management for DOE federal and contractor employees, "Attachment 2, "Contractor Requirement Document," Sections 1-11, 13-18 (delete 18a, 19 delete 19.d.3 and 22).

5.0 General Requirements

Risk-based assessment techniques must be used to identify those ergonomics risk factors that early intervention can control. The employer and employee shall consider both engineering and administrative controls to mitigate ergonomics risk factors.

Personal Protective Equipment (PPE) must be used to supplement engineering or administrative controls when such controls do not sufficiently reduce the risk. PPE shall not be used as a substitute for engineering or administrative control measures.

Preventive activities include workplace evaluation, ergonomics-sensitive design, and employee training and education.

Employees should be informed of the following:

- Ergonomics risk factors and hazards.
- Signs and symptoms of Work-Related Musculoskeletal Disorders (WRMSDs).
- Risk factors and hazard control measures.
- The person to whom the employee should report risk factors and symptoms of WRMSDs.
- Their responsibility to use controls and safe work habits.

Management will visibly support the purpose and requirements of the ergonomics program.

LLNL will identify and appropriately manage WRMSDs via medical and administrative interventions to minimize the severity of associated injuries and to develop control measures to reduce the risk of similar occurrences.

6.0 Implementation

This standard will be implemented in accordance with the LLNL Environment, Safety and Health Manual and other documents determined to be appropriate.